Cyber Warfare Technician (CWT). CWTs employ tactical and strategic capabilities to plan, develop, and execute offensive and defensive Cyberspace Operations; perform Threat Analysis, Digital Forensics, Network Exploitation, Research and Development, and Mission Planning; leverage tactical and strategic signals intelligence and cryptologic functions; produce and execute cyberspace effects; identify and report worldwide threats in support of Special Operations Forces (SOF), national, Fleet, and joint requirements; and control and safeguard access to classified material and information systems.

YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
26-30	CWTCM	20.0 Yrs		Not Defined	8th CONUS/OCONUS **Billets:** Offensive or Defensive Cyberspace Operations Planner (OCO or DCO Planner), TECHAD, CSEL, Rating Advisors/Stakeholder positions (NAVIFOR, OPNAV, FCC, CIWT) **Duty:** Cyber Mission Force, NIOC, Cyberspace Operations Integrated Planning Element (CO-IPE), NCDOC, DEVGRU, IWTC, Naval Special Warfare SEL, Fleet Staff and MOCs
23-26	CWTCM CWTCS	20.0 Yrs 16.4	CMC	Not Defined	7th CONUS/OCONUS **Billets:** Staff Duty (ie. Combatant Command, CSG4/15, 2nd/3rd/5th/ 6th/7th/10th Fleets/Echelon II/III), NCDT NCOIC, NCDT ME Lead, CSEL, Cyberspace Operations Planner, CMF NCOIC, TECHAD, Detailer, Fires Planner, NIWDC, Rate Training Leads (JCAC, CIWT, etc.), Cyber Qualification Training Team (CQTT) **Duty:** Cyber Mission Force, NIOC, Fleet MOCs and CTF Staffs, Cyberspace Operations Integrated Planning Element (CO-IPE), FCC CMF SOUTH, FCC CMF PACIFIC, NSA/CSS, NCDOC, NAVIFOR, Navy Cyber Defense Team (NCDT), Embarked Staff, IWTC, NCWDG, DEVGRU, Naval Special Warfare **Qualification:** See Notes section (3, 5, 6, 9, 11, etc.)

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YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
20-23	CWTCM CWTCS	20.0 Yrs 16.4	CSEL, Masters of Applied Science Cyberspace Operations (MACO), National Intelligence University (NIU), Computer Network Operations Development Program (CNODP), Secretary of the Navy Tours With Industry (SNTWI)	Not Defined	6th CONUS/OCONUS **Billets:** Staff Duty (ie. Combatant Commands, CSG4/15, 2nd/3rd/5th/ 6th/7th/10th Fleets/Echelon II/III), NCDT NCOIC, NCDT ME Lead, CSEL, Offensive or Defensive Cyberspace Operations Planner (OCO/DCO Planner), Directorate SEL, CMF NCOIC, TECHAD, Detailer, Fires Planner, NIWDC, Rate Training Leads (JCAC, CIWT, etc.) **Duty:** USCYBERCOM, FLTCYBER, NAVIFOR, Cyber Mission Force, NIOC, Fleet OCs and CTF Staffs, Cyberspace Operations Integrated Planning Element (CO-IPE), FCC CMF SOUTH, FCC CMF PACIFIC, NSA/CSS, NCDOC, Navy Cyber Defense Team (NCDT), Embarked Staff, IWTC, NCWDG, DEVGRU, Naval Special Warfare, Cyber Qualification Training Team (CQTT) **Qualification** See Notes section (3, 5, 6, 9, 11, etc.)
16-20	CWTCS CWTC	16.4 Yrs 13.0	CSEL, MACO, NIU, CNODP, SNTWI	Not Defined	5th CONUS/OCONUS **Billets:** Staff Duty (ie. Combatant Commands, CSG4/15, 2nd/3rd/5th/ 6th/7th/10th Fleets/Echelon II/III), NCDT NCOIC, NCDT ME Lead, CSEL, Offensive or Defensive Cyberspace Operations Planner (OCO or DCO Planner), Directorate SEL, CMF NCOIC, TECHAD, Detailer, JCAC Manager, Fires Planner, Rate Training Leads (JCAC, CIWT, etc.), NIWDC **Duty:** USCYBERCOM, FLTCYBER, Cyber Mission Force, NIOC, Fleet MOCs and CTF Staffs, Cyberspace Operations Integrated Planning Element (CO-IPE), FCC CMF SOUTH, FCC CMF PACIFIC, NSA/CSS, NCDOC, Navy Cyber Defense Team (NCDT), Embarked Staff, IWTC, NCWDG, DEVGRU, Naval Special Warfare, Cyber Qualification Training Team (CQTT) **Qualification:** See Notes section (3, 5, 6, 9, 11, etc.)

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YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
12-16	CWTC CWT1	13.0 Yrs 7.5	OCS, MECP, Cyber Warrant, MACO, NIU, CNODP, SNTWI	Not Defined	4th CONUS/OCONUS **Billets:** Staff Duty (ie. Combatant Commands, 2nd/3rd/5th/ 6th/7th/10th Fleets/Echelon II/III), Offensive or Defensive Cyberspace Operations Planner (OCO or DCO Planner), JCU and JCOG, Staff, Instructor, Joint Staff, Navy Staff **Duty:** Cyber Mission Force, NIOC, Fleet MOCs and CTF Staffs, NSA/CSS, NCDOC, Navy Red Team, Cyberspace Operations Integrated Planning Element (CO-IPE), FCC CMF SOUTH, FCC CMF PACIFIC, Navy Cyber Defense Team (NCDT), NCWDG, White House Communications Agency (WHCA), DEVGRU, Naval Special Warfare, JCU and JCOG, Cyber Qualification Training Team (CQTT) **Qualification:** See Notes section (3, 5, 6, 9, 11, etc.)
8-12	CWTC CWT1	13.0 Yrs 7.5	Cyber Warrant, OCS, STA-21, OCS, MECP, MACO, NIU, CNODP, SNTWI	Not Defined	3rd CONUS/OCONUS **Billets:** Offensive or Defensive Cyberspace Operations Planner (OCO or DCO Planner), JCU and JCOG, Staff, Instructor, Joint Staff, Navy Staff **Duty:** Cyber Mission Force, NIOC, Fleet MOCs and CTF Staffs, NSA/CSS, NCDOC, Navy Red Team, Navy Cyber Defense Team (NCDT), NCWDG, DEVGRU, Naval Special Warfare, JCU and JCOG, Cyber Qualification Training Team (CQTT) **Qualification:** See Notes section (3, 5, 6, 9, 11, etc.)
4-8	CWT1 CWT2	7.5 Yrs 2.7		Not Defined	2nd CONUS/OCONUS **Billets:** Analyst and operator OCO or DCO billets. JCU and JCOG, Staff, Instructor, Joint Staff, Navy Staff **Duty:** Cyber Mission Force, NIOC, NSA/CSS, NCDOC, Navy Red Team, Navy Cyber Defense Team (NCDT), Fleet MOCs, NCWDG, DEVGRU, Naval Special Warfare, JCU and JCOG **Qualification:** See Notes section (3, 5, 6, 9, 11, etc.)

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YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
1-4	CWT2 CWT3	2.7 Yrs 1.4	Naval Academy, NROTC	Not Defined	1st CONUS **Billets:** Analyst and operator OCO or DCO billets **Duty:** Cyber Mission Force, NIOC, NSA/CSS, NCDOC, Navy Red Team, Navy Cyber Defense Team (NCDT), NCWDG **Qualification:** See Notes section (3, 5, 6, 9, 11, etc.)
1+/-	CWTSN CWTSA Accession Training	9 Months			Recruit Training/Student CWT "A" School (Joint Cyber Analysis Course - JCAC)

Notes:

1. <u>Cyber Warfare Technicians (CWTs)</u> plan, develop, and execute offensive and defensive Cyberspace Operations; perform Analysis, Cyber Defense, Digital Forensics, Network Exploitation, Threat Emulation, Research and Development, Direct Support Operations, and Cyber Planning in support of national, Fleet, and joint requirements.

2. The CWT rating was established in June 2023 and replaced the disestablished Cryptologic Technician Networks (CTN). CTN was started in February 2004 and the first CTN selectees were rated October 1st 2004. CWT is an "A" School (JCAC) required rating. JCAC was established in Oct 2009. CWT is one of eight ratings in the Information Warfare Community.

3. Emphasis should be placed on Sailors in the CWT rating who have clearly demonstrated mission expertise, mission leadership, and clear impact in their rating under their given scope of responsibilities. A career path that has solely focused on traditional leadership positions that have not demonstrated mission impact should not be weighed as heavily. In addition to the standard Navy Apprentice, Journeyman, Senior levels, and US Cyber Command (USCC) Basic, Senior, and Master level qualifications there is an expectation to continue to professionally develop by completing intermediate, advanced, and expert level industry certifications. Additionally, the following are examples of (but not limited to) these qualifications:

General:
- CNODP
- MACO or Bachelor/Master Degree in Cyber related Area
- Intermediate and Expert Level Industry Certifications
  - OSCP
  - GSE/GREM/GCFE
  - CISA/CISM
  - CASP
  - DEVOPS Engineer Professional
- Cyberspace Operations Warfare Tactics Instructor

OCO Specific:
- Weapons and Tactics Instructor (WTI) (EA/ION – CMTs)
- Weapons and Tactics Director (WTD) (EA/ION - JFHQ-Cs)
- Mission Director (EA/ION -USCC J38)

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4. CWT does NOT follow a Sea/Shore Flow (SSF) construct and detailing is dependent upon billet availability and emerging needs of the Navy. Current emphasis is on retours at the Cyber Mission Force (CMF) teams. Sailors should do multiple tours in their work role to build expertise. CWTs can also retour in the same command due to a heavy shore billet base, timing, and operational priority of billets. All CONUS tours will be 48-month tours. Typically, CWTs will transfer between the Cyber Mission Force, Navy Information Operations Command (NIOC), Navy Cyber Warfare Development Group (NCWDG), Navy Cyber Defense Operations Command (NCDOC), Naval Special Warfare, Staff Duty, and DIRSUP Commands. All notes in this paragraph SHALL NOT be a limiting factor for selection / non-selection to the next paygrade.

5. CWT qualifications are typically divided into Offensive or Defensive areas shown below. Some NECs may appear in multiple career paths and "Other" NECs may not appear on these lists of Core NECs Paygrade levels start at CWT3 due to automatic advancement to E4. Some NECs may be awarded at the E1-E3 level. Sailors should qualify in their work roles and progress from basic qualifications to more senior/master and journeyman level qualifications.

 * As of May 2025, senior and master level NECs have been submitted to NAVMAC and are pending approval. They will be annotated with a B or C replacing A on the core NEC (example: H12B would be a senior level EA).

      a.   Offensive Cyberspace Operations (OCO) Core NECs

NEC	ROLE	RECOMMENDED PAYGRADES; COMMENTS
H11A	Digital Network Analyst (DNA)	CWT3+
H12A	Exploitation Analyst (EA)	CWT3+
H13A	Navy Interactive On-Net (ION) Operator	CWT3+; See section 6
H14A	Navy ION Operator (Windows)	CWT2+; See section 6
H15A	Navy ION Operator (Unix)	CWT2+; See section 6
H16A	Navy ION Operator (Networks)	CWT2+; See section 5
H29A	Cyberspace Operations (CO) Planner	CWT1+; May also be qualified in another technical work role within the career path prior to becoming a Cyber Planner
H41A	Basic Offensive Cyber Operator	CWT3+
H42A	Cyber Research and Development (R&D) Specialist	CWT2+

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b.   Defensive Cyberspace Operations (DCO) Core NECs

NEC	ROLE	RECOMMENDED PAYGRADES; COMMENTS
H29A	CO Planner	CWT1+; May also be qualified in another technical work role within the career path prior to becoming a Cyber Planner
H30A	Cyber Defense Analyst (CDA) - Basic	CWT3+
H31A	CDA (Host)	CWT3+
H32A	Cyber Threat Emulation Operator (CTEO)	CWT2+
H34A	CDA (Network)	CWT3+
H42A	Cyber R&D Specialist	CWT2+

c.   Naval Special Warfare (NSW) Cyberspace Operations (CO) Core NEC List

NEC	ROLE	RECOMMENDED PAYGRADES; COMMENTS
703C	NSW Tactical Information Operations (TIO) Analyst	CWT2+; See section 7
708A	Expeditionary Information Warfare (Tactical)	CWT2+; See section 7
771B	NSW TIO Operator	CWT2+; See sections 6-7
785B	Special Operations Forces (SOF) Offensive Cyberspace Operator	CWT2+; See sections 6-7
785C	Special Operations Forces Expeditionary Cyberspace Operator (SOF ECO)	CWT2+, See sections 6-7
785D	Special Operations Forces Tactical Cryptologic Warfare Operator (SOF TAC-CWO)	CWT2+, See sections 6-7
785E	Special Operations Forces Sensitive Collection and Reconnaissance Operator (SOF SCAR-O)	CWT2+, See sections 6-7

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d. Rating "Other" NECs

NEC	ROLE	RECOMMENDED PAYGRADES; COMMENTS
H07A	Applied Cyber Operations Master	CWT1+
702C	Information Warfare (IW) Warfare Tactics Instructor (WTI)	CWTC+; See section 9
732A	East Asia Area Specialist	CWT2+; Tracking NEC awardable to IW ratings after a minimum of four years with documented mission in AOR.
831A	Maritime Staff Operators Course	CWTC+; See section 13

6. CWTs with NECs H13A-H16A and 785B/C/D/E complete a rigorous training pipeline. Sailors with NECs H13A-H16A are required to complete a minimum of two consecutive Interactive On-Net (ION) Operator tours. CWTs with 785B/C/D/E, NEC 771B and NEC 703C are assigned to Naval Special Warfare Development Group (DEVGRU), Special Reconnaissance Teams (SRT), and NSW Mission Support Center (MSC). Assignment as a NSW TIO Operator incurs a five (5) year commitment while a NSW TIO Analyst incurs a four (4) year commitment. Sailors completing the qualification requirements for awarding of these NECs serve in a performance-based mission area and may not support traditional opportunities due to operational requirements and shall not be a limiting factor for selection / non-selection of the next paygrade.

7. DEVGRU, SRTs, NSW MSC, Joint Cyber Operations Group (JCOG), Joint Communication Unit (JCU), White House Communications Agency (WHCA), and Cyber Qualification Training Teams (CQTT) can be career enhancing and demanding tours. Secretary of the Navy Tours with Industry (SNTWI), Masters of Science in Applied Cyberspace Operations (MACO), and Computer Network Operations Development Program (CNODP) can be opportunities for CWTs to build additional technical expertise. These special programs require CWTs to be selectively screened and detailed. Subsequent tours within these special programs should not be looked at unfavorably.   CQTT members may accrue extensive TAD while supporting the qualification of Cyber Mission Force teams outside of their Permanent Duty Station location. Additionally, while on an operational shore tour or with Naval Special Warfare Special Reconnaissance Teams (SRT), DEVGRU, Joint Communications Unit (JCU) and Joint Cyber Operations Group (JCOG), may accrue extensive deployment and TDY supporting Overseas Contingency Operations and may have the opportunity to qualify EXWS.

8. NCDOC's Sea Duty component (Navy Cyber Defense Team (NCDT) offers CWTs the ability to conduct DCO afloat on Carrier Strike Group and Amphibious Ready Group Staffs. While in this capacity, CWTs have the opportunity to earn ESWS and EAWS and are expected to receive at least one additional warfare qualification while attached to the NCDT. CWTs assigned to Carrier Strike Groups FOUR and FIFTEEN direct, execute, mentor, and assess at-sea Cyberspace Operation training of Carrier Strike Groups (CSG) & Amphibious Ready Groups (ARG), enabling them to operate in integrated, joint, & coalition environments in the conduct of combat. CWTs at these units do NOT have the opportunity to qualify for Enlisted Surface or Aviation Warfare (ESWS / EAWS) due to the rapid augmentation for dynamically certifying multiple afloat units each year.

9. CWTs with the Naval Information Warfighting Development Center (NIWDC) Warfare Tactics Instructor (WTI) Qualification (NEC 702C) are selected and screened to complete a demanding training pipeline; as WTIs, they are expected to develop tactics, techniques and procedures (TTPs) for publication into Naval doctrine. WTIs develop and validate TTPs, and integrate cyberspace operations capabilities into all warfare areas. WTIs demonstrate advanced instructional techniques; develop, implement, and evaluate curricula, and instruct for the Naval Information Warfare Advanced Weapons School (NIWAWS).WTI training development. If stationed at NIWDC, any CWTC or above should be qualified as a WTI to be considered best qualified during tour.

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10. Personnel assigned to Naval Recruiting, Recruit Training Command (RTC), Officer Training Command (OTC) and Naval Academy as a Recruit Division Commander, are carefully screened and selected for these high priority assignments. CWTs do not release significant numbers to these specific Special Duty programs (or others) but if released it should not be a detractor.

11. The Computer Network Operations (CNO) Mid-Career Cryptologic Continuing Education Program (MCCEP) is designed to enhance the professional development and technical skills of its participants. Completing this program advances the technical knowledge and operational expertise in the field of cryptologic computer network operations. There are 4 phases in the track with typically 1 year experience for phase 1, 2 years for phase 2, 5 years for phase 3, and 8 years for phase 4. Currently, the program is open to individuals assigned to National (P3) mission billets. However, The Cryptologic Training Council is actively working with all Service's cryptologic signatories to expand access and opportunity across both National and Service billets and mission sets. MCCEP, although not a requirement, it is highly recommended and viewed as an enhancer for Sailors already assigned to P3 billets/supporting P3 mission sets as it significantly contributes to their technical growth.

12. CWTs may also show education with cybersecurity and computer science related degrees. Certifications relevant to paygrades are available through Navy COOL and enhance technical knowledge and career progression.

13. Sailors assigned to Fleet Commands, Combatant Commands, Cyberspace Operations Integrated Planning Elements, and FCC CMF may not have opportunities to display leadership in the traditional Navy roles. Leadership of personnel while assigned to these commands may be captured with partner nation activity, exercise development and execution, and domain wide impact to geographic and functional areas of responsibility.

14. The CWT Rating Strategy Council (RSC) is a week-long conference, driven by the TYCOM Rating Lead, OPNAV Rating Resource Sponsor, and Rating Technical Advisor. It is designed to identify rating pressure points, requirements, and shape crucial strategies for occupational investments and change requirements. Its goal is to address fleet, joint, and national operational MT&E needs and support requirements more effectively. The RSC conference itself is specifically structured for and shaped by rated E9s in key stakeholder positions, select E8s may participate if they occupy critical positions where an E9 is not present. However, the most consideration should be given to the critical and valued contributions of our SCPOs/CPOs who lead the post-RSC functional area working groups and subordinate line of effort initiatives which should be clearly captured in their performance evaluations with documented quantifiable impact and outcomes, followed by specific working group-level contributions. These post-RSC roles are where significant rating leadership over time is exercised and where the most significant impact is achieved and why more value is placed on post-RSC actions.

Considerations for advancement from E6 to E7

Fully Qualified:
- Shall show strong documented technical and operational knowledge. Technical expertise is the primary consideration.
- Clearly demonstrate operational leadership amongst peers by position and performance and team's ability to successfully execute mission.

Best Qualified:
- Should show leadership by completing successful tour(s) as Crew Lead, Senior and Master Lead Analyst or Operator, Mission Supervisor, Cyberspace Operations Planner, DCWO, Rating Detailer, CQTT Accessors, Program Manager, or Instructor.
- Master Training Specialist (MTS) qualifications for IWTC Instructor billets and Afloat Training Specialist (ATS) qualifications for CSG 4/15 assigned to those billets. Those serving in a National instructor capacity should qualify Adjunct Faculty or Faculty Certification.
- Enlisted Warfare Qualifications are expected when available at commands with warfare qualifications. Qualifications such as WTD, CNODP, etc., are considered special qualifications. Those who have these qualifications are considered technical experts and should have documented contributions to the cyberspace domain. Any additional command duties or involvement should show successful impact to the command.

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Considerations for advancement from E7 to E8

Fully Qualified:
- Shall demonstrate strong documented technical and operational knowledge and successful leadership in billet assigned.

Best Qualified:
- Should clearly demonstrate operational leadership amongst peers by completing successful tour(s) as Mission Element Lead (CPT/NCDT), Operations Lead, Senior ION Operator (Windows/Unix/Network), Senior Developer, ION Instructor, NIWAWS Instructor, and CQTT Lead Accessor. .
- In addition to operational impact, demonstrated success in command or other leadership positions.
- Active participation and documented impact to CWT rating. Participation in events like OCCSTDs, AERR, or Rating Strategy Council or Functional Areas and Lines of Efforts identified from the Rating Strategy Council, should show documented impacts to the rating.
- Master Training Specialist (MTS) qualifications for IWTC Instructor billets and Afloat Training Specialist (ATS) qualifications for CSG 4/15 assigned to those billets. Those serving in a National instructor capacity should qualify Adjunct Faculty or Faculty Certification.
- Enlisted Warfare Qualifications are expected when available at commands with warfare qualifications. Qualifications such as WTI, WTD, Mission Director, CNODP, etc., are considered special qualifications. Those who have these qualifications are considered technical experts and should have documented contribution to the cyberspace domain.

Considerations for advancement from E8 to E9

Fully Qualified:
- Shall show strong documented technical and operational knowledge and successful leadership in billet assigned.

Best Qualified:

- Clear demonstration of leading mission and cyberspace operations by completing successful tour(s) as NCOIC (CPT/NCDT), Fires Planner, DCO Planner, Master Analyst or Operator, Task Group SEL, NIWAWS Instructor, and CQTT Leader.
- In addition to operational impact, demonstrated success in command or other leadership positions.
- Clear demonstration in leading within the command, community, and CPO Mess.
- Active participation and documented impact to CWT rating. Participation in events like OCCSTDs, AERR, or Rating Strategy Council should show documented impacts to the rating.
- Master Training Specialist (MTS) qualifications for IWTC Instructor billets and Afloat Training Specialist (ATS) qualifications for CSG 4/15 assigned to those billets. Those serving in a National instructor capacity should qualify Adjunct Faculty or Faculty Certification.
- Enlisted Warfare Qualifications are expected when available at commands with warfare qualifications (i.e. serving in direct support capacity while assigned to NCDTs).
- Qualifications such as WTI, WTD, Mission Director, CNODP, etc., are considered special qualifications. Those who have these qualifications are considered technical experts and should have documented contribution to the cyberspace domain.

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